

# INSTALL/REMOVAL INSTRUCTIONS: AIR SUSPENSION CONVERSION KIT

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## **Air Suspension Conversion Kit**

### **General Installation Instructions**

When servicing any vehicle be sure to follow all safety procedures. First, make sure that when lifting the vehicle that you use an appropriate jack with a proper weight rating. Before going underneath any vehicle, make sure that it is properly supported with sturdy jack stands and on level ground so that the vehicle doesn't fall or slide off of the jack and onto you. As with any automotive repair, make sure you have the appropriate tools to do the job so you don't damage any parts on the vehicle. Safety glasses and mechanic's gloves should also be worn for your protection.

Take care not to exceed the Gross Vehicle Weight Rating (GVWR), or the maximum load recommended by the manufacturer. It is important that all the vehicle owner manuals recommendations are followed for your own safety and to prevent damage to the vehicle.

Once you are ready to disable the ride light, you will need to disconnect the negative battery cable (-) to prevent electrical shock/malfunction.

Dorman are proud to offer a high quality product at the industries most competitive pricing!

#### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Strut Instructions

### Tools needed for installation

- Metric socket set
- Metric wrench set
- Screwdrivers (Phillips and flat head)
- Wire cutter/stripper/crimping tool
- Allen wrenches
- Floor jack or automotive lift
- Jack stands

### Cadillac Suspension Warning Light Disarming Check List

- Remove negative cable from battery before installing kit.
- Follow kit installation instructions ensuring all steps have been successfully completed.
- Install electronic components as instructed.
- Ensure height sensors remain connected.
- Reattach battery cable.
- Clear all present & past OBD codes. This process may require a scan tool.
- If installing a rear kit, pull the compressor fuse (30 to 50 amp) located in the engine or trunk compartments.

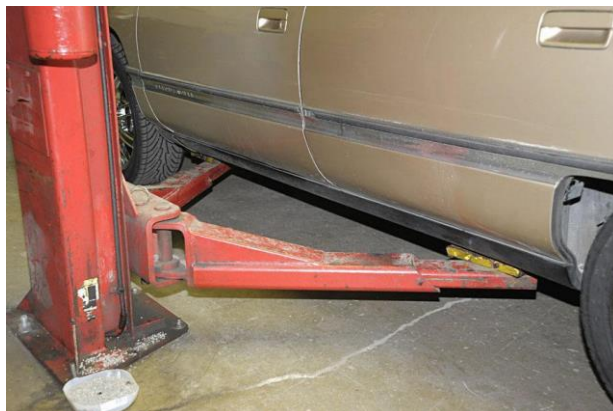
Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Removal Instructions

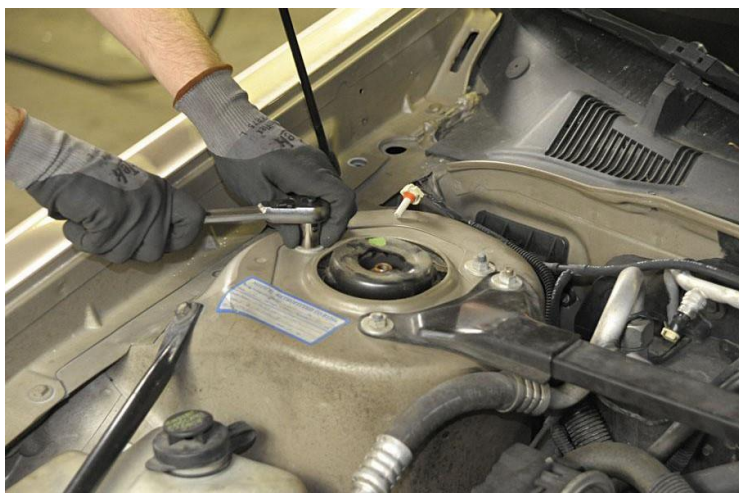
- Lift and support the vehicle by frame.



- Remove the wheels



- Remove the three nuts securing the strut to the body.



Support the knuckle mount.



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Removal Instructions

**Note:** When working near the drive axles, care must be taken to prevent inner tri-pot joints from being overextended. Overextension of the joint could result in separation of internal components which could go undetected and result in failure of the joint. Care should be taken to avoid scratching or cracking the spring coating when handling the front suspension coil spring. Damage can cause premature failure.

- Disconnect the electronic suspension electrical connectors leading to the struts. Depending on the model, this may be located on either the top of the strut, or inside the inner fender apron.



- Disconnect link rod at lower control arm for road sensing suspension (if equipped).
- Mark strut in relation to steering knuckle for installation. On some models the lower strut to the steering knuckle bolt serves as the camber alignment set point.

Mark old strut here, try to match new strut as closely as possible.



**Note:** A four wheel alignment is recommended upon completion.

### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.



**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Removal Instructions

- Remove brake line bracket and ABS bracket from the strut assembly.



- Remove the stabilizer link from strut (if equipped).



- Make sure that the steering knuckle remains supported to prevent damage to drive shaft joints.



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Removal Instructions

- Remove the fasteners securing the strut to the knuckle assembly. Support the knuckle assembly to prevent the drive shaft joint from separating.



- While pulling towards you and pushing on the strut, remove the bottom strut mount from the steering knuckle.



- Remove the old strut from the vehicle.



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Front Installation Instructions

- Install the new strut by placing the bottom through first to clear the fender.



- Push the mount studs up through the strut tower. Hand start the nuts onto the studs. Do not fully tighten.



- Install and tighten the bolts connecting the strut to the knuckle assembly.
- Completely tighten the upper stud nuts.
- Follow the Suspension Light Disarm Instructions.



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

**Note:** Read all instructions carefully before attempting installation

- The bypass resistors are designed to connect to the factory vehicle harness at each wheel which controlled the strut dampening solenoids.
- The supplied bypass resistor may be equipped with a plug connector which can simply be plugged into the vehicle's harness for installation.
- If the connector does not match the factory harness connector, both connectors may be cut off and the two wires from factory harness connected to the bypass resistor wires using butt connectors.

**Note:** The connection is not polarity specific, either wire from the factory harness may be connected to either wire on the bypass resistor.

- These resistors are only meant to simulate the dampening solenoids of the factory strut units, not to disable the entire system.
- Check the vehicles OBD suspension codes to ensure that no other faults exist or that a suspension error message is not present.

Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.



**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions

### Tools needed for installation

- Metric socket set
- Floor jack
- Jack stands
- Metric wrenches
- Wire cutter/stripper/crimping tool
- Screwdrivers (Phillips and flat head)
- Spring compressor (if applicable)
- Allen wrenches

Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions

### Rear Shock Removal Instructions

- Raise and support the vehicle. Remove rear wheels. (See Figures 1-2)

Fig. 1



Fig. 2



- Remove air tube from the shock.  
(See Fig. 3)

Fig. 3



- Remove two bolts securing the shock to control arm.

**Note:** Some models may have only one bolt securing the bottom of the shock.  
(See Fig. 4)

Fig. 4



#### Disclaimer:

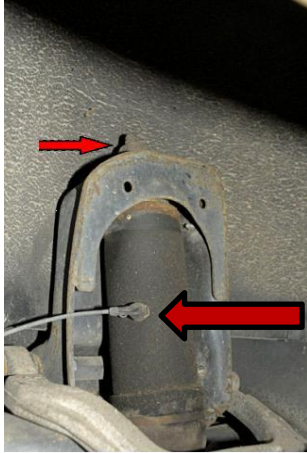
Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions

- Remove upper shock nut and remove the shock from the vehicle. (See Figures 5 - 6)

Fig. 5



Remove the air line to the shock.

Fig. 6



- Keep the old factory washer from the top of the shock as shown in Fig. 7. This shock washer is reused

Fig. 7



- Remove the shock from the vehicle. Make a note of the shock bushings prior to removing them from the old shock.

Save and reuse this washer



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.



**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions Rear Coil Spring Removal Instructions

- Disconnect the rear stabilizer bar from the knuckle. (See Figures 1 - 2)

Fig. 1

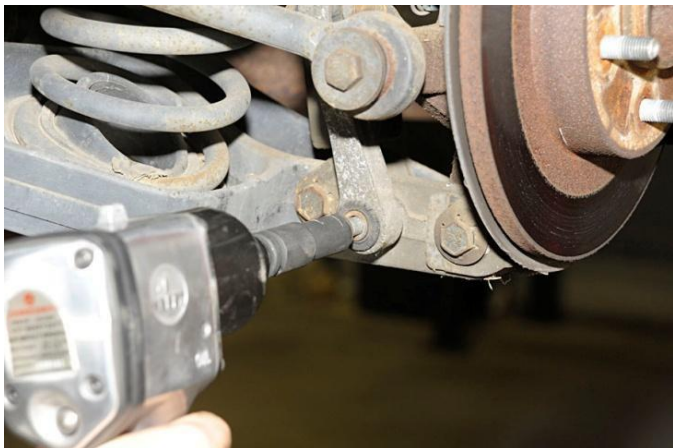
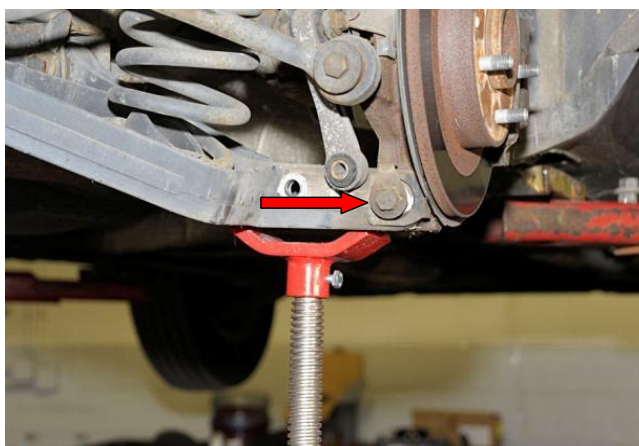


Fig. 2



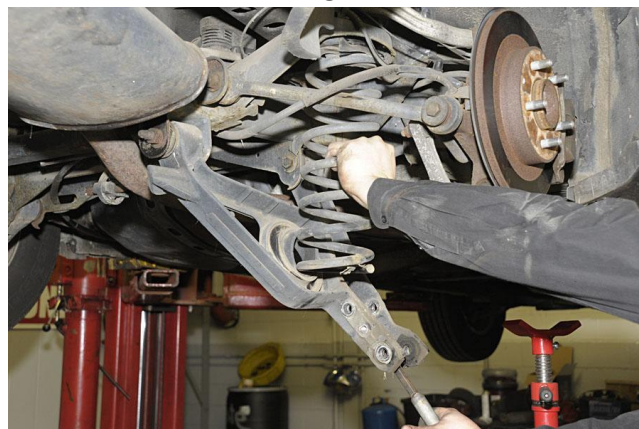
- Place the jack under the control arm to relieve tension from pivot bolts. Remove the rear control arm bolts and nut. (See Fig. 3)

Fig. 3



- Slowly lower the jack until the bolt can be removed. Remove the coil spring. (See Fig. 4)

Fig. 4



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.



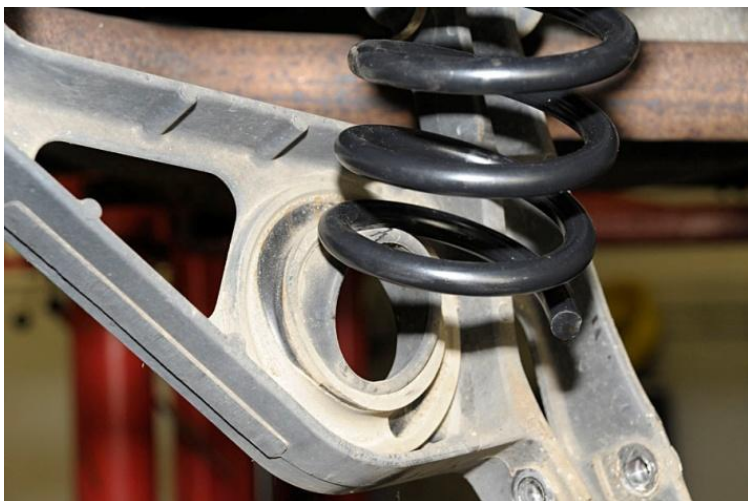
**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions Rear Coil Spring Installation Instructions

Read the instructions carefully before attempting the installation. Call our Technical Support Line with any problems during the installation.

**Important:** To ensure proper orientation of the spring, rest the spring (without insulators) on a flat surface. The spring will stand up straight when resting on its top end, but will lean or tip when resting on its bottom end.

- Install with the flat side up, and the pig tail at the lowest point on control arm. On the passenger side, the pig tail will point to the rear of the vehicle. On the driver's side, the pig tail will point to the front of the vehicle.



- Slowly jack up the rear control arm and replace bolt.
- Reconnect the rear stabilizer bar and lower shock mount.
- Remove the jack.



### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions Cadillac Rear Shock Washer Set-up Steps

Step 1: Locate top shock bushing and bottom shock bushing



Step 2: Install lower bushing kit.



Step 3: Install in vehicle.



Step 4: Reuse original shock washer with new top bushing.



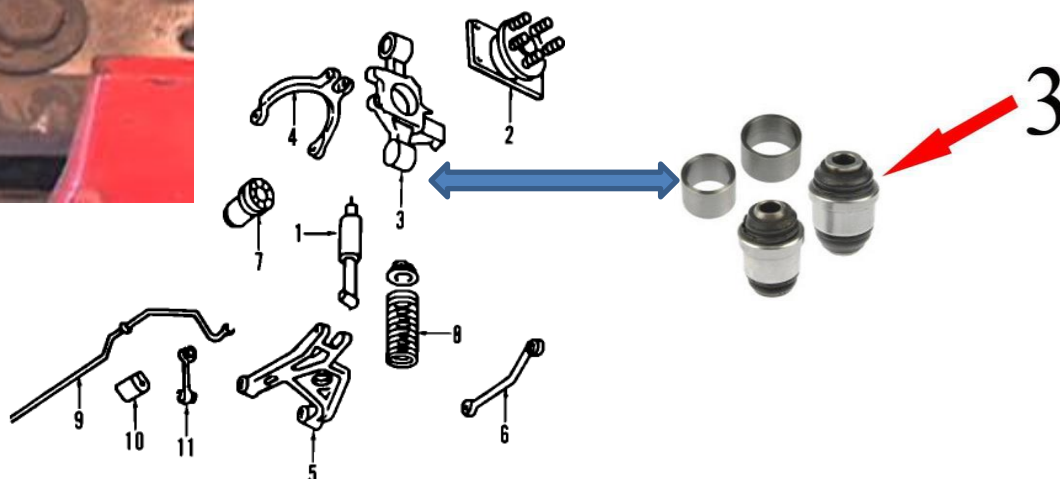
### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions

- Install and tighten the lower shock bolt.



**Note:** The rear springs may settle during the first couple of weeks of use. It may be necessary to adjust the front height sensors to match the level of the new rear springs.

The rear springs can sit low if the rear shocks are bad. Test the rear shocks by pushing down on the rear of the car. If the rear bounces, then also replace the shocks.

### Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.



**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

## Cadillac Rear Installation Instructions

### Cadillac Rear Electronic Bypass Installation

- Locate the resistors that are supplied with the kit. (See Fig. 1)

Fig. 1



- It's necessary to cut the plug ends off of the old front and rear shocks or struts.

Fig. 2



- Next, strip the wires and crimp to the resistors using the connector attached to the resistors. (See Figures 2 – 4)

Fig. 3



Fig. 4

